

IN THE CLAIMS:

1. - 27. (Cancelled)

28. (New) Congeneric, chlorinated or brominated, fluorinated compounds having two benzene rings in the base structure thereof, selected from the group consisting of:

- 4'-fluoro-2,3',4-tribromodiphenylether,
- 4'-fluoro-2,3',6-tribromodiphenylether,
- 4'-fluoro-2,3',4,6-tetrabromodiphenylether,
- 4'-fluoro-2,3,3',4,5,6-hexabromodiphenylether,
- 2'3,3',4,5,5',6,6'-octabromo-2,4'-difluoro-diphenylether,
- 2, 4,4'-trichloro-3'-fluorobiphenyl,
- 2',4',4-trichloro-3,5-difluorobiphenyl,
- 4-methyl-2,2',5,6-tetrachloro-3'-fluoro-diphenylmethane,
- 4-methyl-2,2',5,6-tetrachloro-3',5'-difluoro-diphenylmethane,
- 4-methyl-2,2',5,6-tetrachloro-3,3'-difluoro-diphenylmethane,
- 1,2,3,7,8,9-hexachloro-4-fluoro-dibenzofurane,
- 1,2,3,7,8,9-hexachloro-4,6-difluoro-dibenzofurane,
- 2,3,7,8-tetrachloro-1-fluoro-dibenzo-p-dioxin,

- 1,4,6,9-tetrachloro-2-fluoro-dibenzo-p-dioxin and
- 1,2,3,7,8,9-hexachloro-4,6-difluoro-dibenzo-p-dioxin.

29. (New) A method of manufacturing

- 4'-fluor-2,3',4-tribromodiphenylether;
- 4'-fluoro-2,3',6-tribromodiphenylether;
- 4'-fluoro-2,3',4,6-tetrabromodiphenylether, and
- 4'-fluoro-2,3,3',4,5,6-hexabromodiphenylether

by conversion of 3,3'-dibromo-4,4'

difluorodiphenyliodoniumchlorid with 2,4-dibromophenol,

2,6-dibromophenol, 2,4,6-tribromophenol and

pentabromophenol.

30. (New) A method of analyzing analytic and organic compounds
by using:

- 4'-fluoro-2,3',4-tribromodiphenylether;
- 4'-fluoro-2,3',4-tribromodiphenylether;
- 4'-fluoro-2,3',6-tribromodiphenylether;
- 4'-fluoro-2,3',4,6-tetrabromodiphenylether;
- 4'-fluoro-2,3,3',4,5,6-hexabromodiphenylether;
- 2'3,3',4,5,5',6,6'-octabromo-2,4'-difluoro-diphenylether;
- 2, 4,4'-trichloro-3'-fluorobiphenyl;
- 2',4',4-trichloro-3,5-difluorobiphenyl;

- 4-methyl-2,2',5,6-tetrachloro-3'-fluoro-diphenylmethane;
- 4-methyl-2,2',5,6-tetrachloro-3',5'-difluoro-diphenylmethane;
- 4-methyl-2,2',5,6-tetrachloro-3,3'-difluoro-diphenylmethane;
- 1,2,3,7,8,9-hexachloro-4-fluoro-dibenzofurane;
- 1,2,3,7,8,9-hexachloro-4,6-difluoro-dibenzofurane;
- 2,3,7,8-tetrachloro-1-fluoro-dibenzo-p-dioxin;
- 1,4,6,9-tetrachloro-2-fluoro-dibenzo-p-dioxin, and
- 1,2,3,7,8,9-hexachloro-4,6-difluoro-dibenzo-p-dioxin.

31. (New) A method of application according to claim 30, characterized in that the analytical compound is used in halogen organic compounds.

32. (New) The method according to claim 31, comprising using the compounds

- as intern standards or surrogate standards which together with their base compounds undergo physical, chemical and/or biological processes and are subsequently detected and/or analyzed together with the processes or separately from the processes;

- as external standards, which instead of their base compounds undergo physical, chemical and/or biological processes for the purpose of calibrating these processes and are analyzed and/or detected separately from the base compounds;
- and/or undergo instead of their base compounds chemical and/or biological processes as model compounds for the purpose of detecting reaction mechanisms whose reaction products are detected and/or analyzed.

33. (New) The method according to claim 32, wherein the base compounds are the congeneric, chlorinated and brominated diphenylethers, biphenyls, diphenylmethane, dibenzofurane, and dibenzo-p-dioxin.